CLASS TITLE: SENIOR REACTOR FACILITY ENGINEER

Class Code: 02997300 Pay Grade: 32A EO: B

CLASS DEFINITION:

GENERAL STATEMENT OF DUTIES: To be responsible for the engineering phases of all physical improvements, construction, modifications, and repairs at the Rhode Island Nuclear Science Center: to provide professional engineering assistance and advice to the Director and experimenters at the Rhode Island Nuclear Science Center; and to do related work as required.

<u>SUPERVISION RECEIVED</u>: Works under the general direction of the Director with wide latitude for the exercise of independent judgement; work is subject to review for conformance to Rhode Island Atomic Energy Commission and United States Atomic energy Commission policies and state and federal rules and regulations.

<u>SUPERVISION EXERCISED</u>: Plans, organizes, supervises and reviews the work of staff members engaged in performing engineering work at the Nuclear Science Center; supervises and inspects the work of consultant engineers and contractors in performing work at the Center.

ILLUSTRATIVE EXAMPLES OF WORK PERFORMED:

To be responsible for the engineering phases of all phases of all physical improvements, construction, modifications, and repairs of the reactor site, buildings, reactor, equipment and experiments installed at the reactor.

To make studies and establish minimum design requirements for proposed experiments and new facilities.

To design and plan additions to the reactor building, the reactor and machinery.

To supervise the preparation of architectural and engineering drawings of structures and machinery.

To assist in the preparation of requests for federal grants under programs of the United States Atomic energy Commission, National Science Foundation and the United States Office of Education and to prepare requests for partial final payments.

To supervise and inspect the work performed at the Nuclear Science Center by private contractors; to interpret plans and specifications; to furnish lines, grades and elevations; to enforce compliance with plans and specifications of engineering projects; to make weekly estimates of payments and check contractors' payrollees; to review and make recommendations relating to requests for changes to plans and recommendations.

To review and analyze all work done by consultant engineers for conformance to rules, regulations and policies of federal and state laws, United States Atomic Energy Commission, and the Rhode Island Atomic Energy Commission.

To prepare reports and submit recommendations to the Director relating to the planning, expansion and improvement of the Nuclear Science Center.

To supervise facility operations and reactor operations.

To do related work as required.

REQUIRED QUALIFICATIONS FOR APPOINTMENT:

KNOWLEDGES, SKILLS AND CAPABILITIES: A thorough knowledge of the principles, practices and techniques of mechanical and nuclear engineering and heat transfer; a thorough knowledge of the principles, practices, methods and materials relating to the construction of nuclear facilities; the ability to design and plan construction of new buildings and additions, modifications and repairs to existing

buildings and facilities at the Center; the ability to prepare complex engineering reports, plans and specifications; the ability to interpret plans and specifications; the ability to inspect complex engineering work for compliance with plans and specifications; the ability to provide engineering advice concerning experiments at the Center; the ability to plan, direct, coordinate and supervise the work of mechanical operations; the ability to acquire and apply the principles, practices, methods and techniques of operations; at the Nuclear Science Center; and related capacities and abilities.

EDUCATION AND EXPERIENCE:

<u>Education</u>: Such as may have been gained through: graduation from a college of recognized standing with specialization in mechanical, chemical, nuclear engineering, or engineering physics; and

<u>Experience</u>: Such as may have been gained through: employment involving the application of principles, practices, methods and techniques in the field of Mechanical, Chemical, Nuclear Engineering or Engineering Physics.

Or, any combination of education and experience that shall be substantially equivalent to the above education and experience.

<u>SPECIAL REQUIREMENT:</u> At the time of appointment, must possess a certificate of a Registered Professional Engineer issued by the Rhode Island State Board of Registration for Professional Engineers and Land Surveyors or a U.S. Coast Guard Chief Engineer license; and within six months from the date of appointment, must possess a Senior Reactor Operator's License issued by the United States Atomic Energy Commission for operation of the Rhode Island Reactor and must maintain the aforementioned certifications and licensure as a condition of employment.

Class Revised: March 26, 2000

Editorial Review: 3/15/03